



City of Dallas

Progress on Vision Zero Action Plan Development

**Transportation and
Infrastructure Committee
November 15, 2021**

Ghassan “Gus” Khankarli, Ph.D. P.E.,
Director, Department of Transportation

Kathryn Rush, AICP, Chief Planner
Department of Transportation

Presentation Overview



1. Purpose
2. Background
3. Vision Zero Action Plan Development
4. Focus Areas for the Vision Zero Action Plan
5. Draft Recommendations
6. Next Steps
7. Discussion/Feedback



1. Purpose



- Brief the Transportation and Infrastructure Committee on the progress to date with developing the Vision Zero Action Plan.
- Inform members about the upcoming virtual Public Meeting and survey to solicit input on the draft recommendations.



2. Background



State of Traffic Safety in Dallas

- 80% increase in the number of traffic fatalities per year from 2010 to 2020.^a
- Among the 15 most populated cities in the U.S., Dallas has the second highest traffic fatality rate per 100,000 population (14.11; average from 2015-2019).^b
- The other major Texas cities have fatality rates below the national average of 11.22.^b
- The annual number of traffic deaths in Dallas was 228 in 2020, and as of October 2021 was 158.^c

Sources:

a)TxDOT, Crash Records Information System, 2019-2020; National Highway Traffic Safety Administration, Annual Traffic Safety Facts, 2010-2019.

b)National Highway Traffic Safety Administration, Annual Traffic Safety Facts, 2015-2019

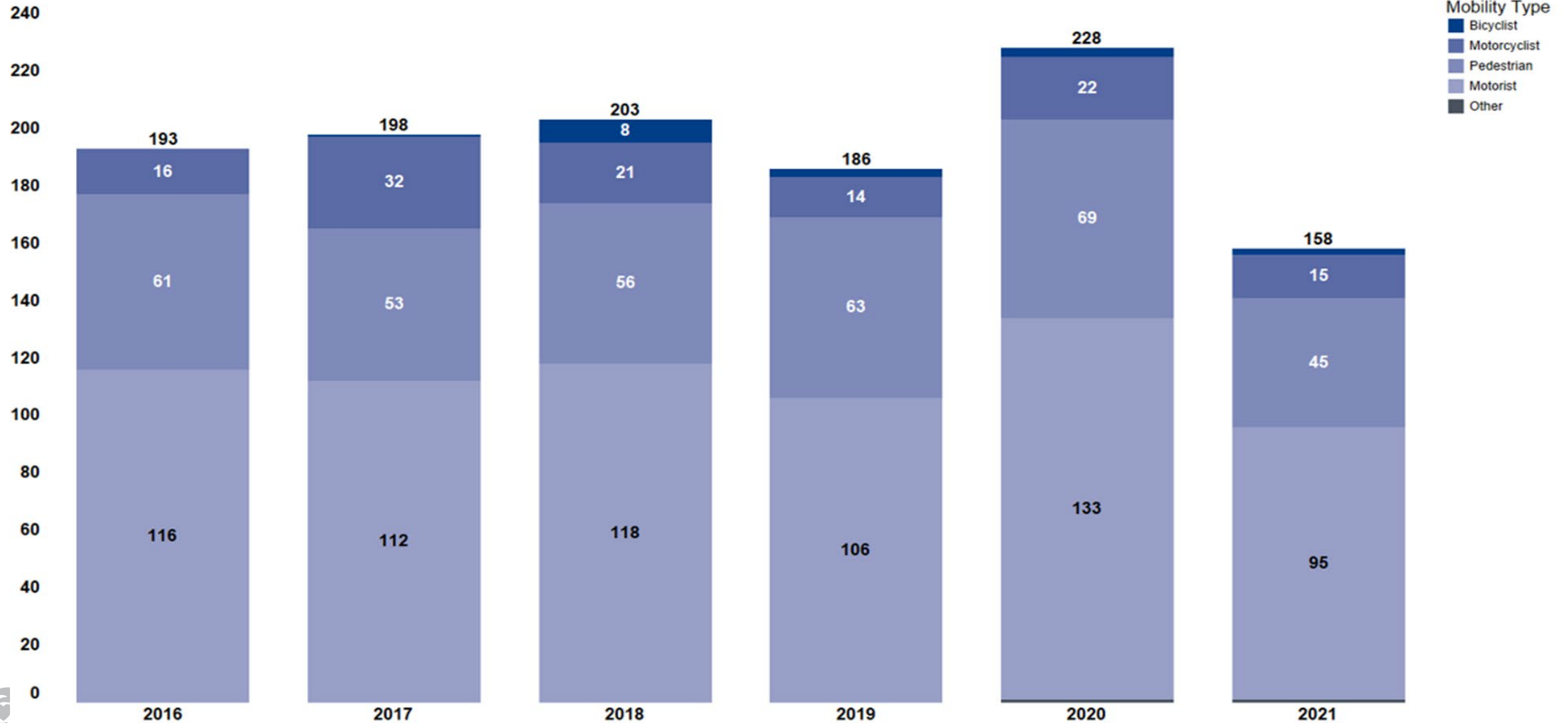
c)TxDOT, Crash Records Information System



2. Background



Fatality Types By Year



2. Background



City Council Vision Zero Resolution 19-1583

- Committed the City to a **goal of ZERO traffic fatalities** and a 50% reduction in severe injuries **by 2030**.
- Directed the City Manager to:
 - Develop a Vision Zero Action Plan by December 2021
 - Convene a Vision Zero Task Force that will collaborate with city departments on the development of a Vision Zero Action Plan
 - Direct city departments to participate in Vision Zero Action Plan development, implementation, and evaluation



2. Background



Introduction to Vision Zero

- A recognized strategy to eliminate traffic fatalities.
- Based on the belief that no loss of life is acceptable and that all traffic fatalities and severe injuries are preventable.
- 5 Es approach: Engineering, Enforcement, Education, Evaluation, Equity.

TRADITIONAL APPROACH

Traffic deaths are **INEVITABLE**

PERFECT human behavior

Prevent **COLLISIONS**

INDIVIDUAL responsibility

Saving lives is **EXPENSIVE**

VS

VISION ZERO

Traffic deaths are **PREVENTABLE**

Integrate **HUMAN FAILING** in approach

Prevent **FATAL AND SEVERE CRASHES**

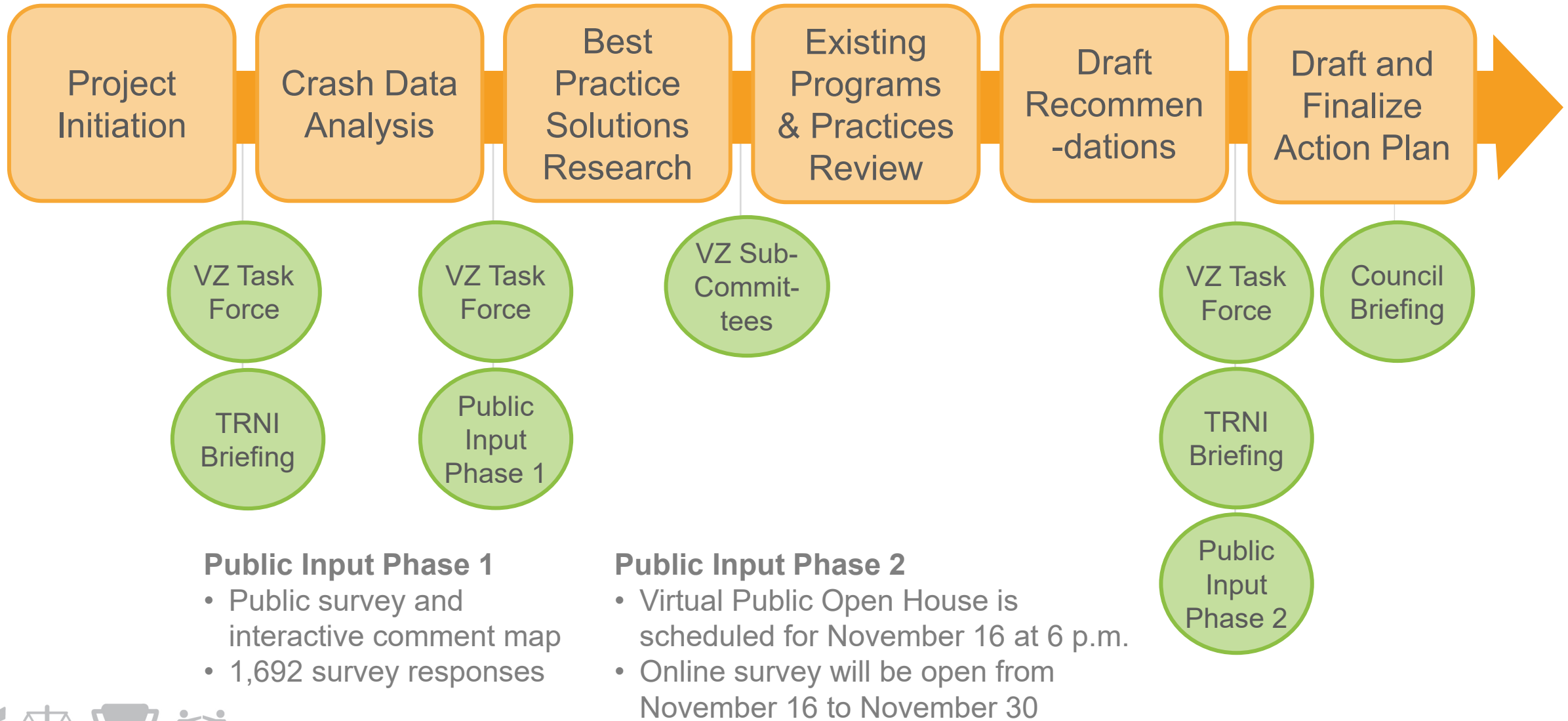
SYSTEMS approach

Saving lives is **NOT EXPENSIVE**



Photo courtesy: Vision Zero Network

3. Vision Zero Action Plan Development



3. Vision Zero Action Plan Development



Vision Zero Task Force

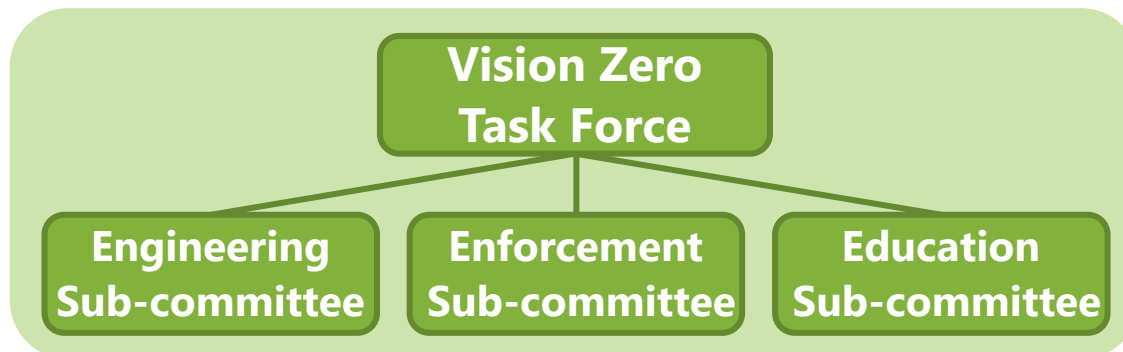
City Departments:

- Transportation
- Public Works
- Police
- Fire-Rescue
- Data Analytics
- Budget Office

External Agencies:

- Dallas County Sheriff's Office
- Dallas County Health and Human Services
- TxDOT
- NCTCOG

- Baylor University Medical Center
- Parkland Injury Prevention Center
- Children's Medical Center
- Mothers Against Drunk Driving
- AARP
- BikeDFW



4.Focus Areas for the Action Plan



- Focus Areas identify what factors and locations account for the highest percentage of fatal and severe crashes in Dallas.
- Identified through the crash data analysis and public survey, with additional input from the Vision Zero Task Force.
- Focus areas are targeted as a priority with enforcement, engineering, and education to have the greatest impact on meeting the Vision Zero goal.
- Some of these targeted areas are in the process of being addressed through various programs such as TxDOT's HSIP Program.



4. Focus Areas for the Action Plan



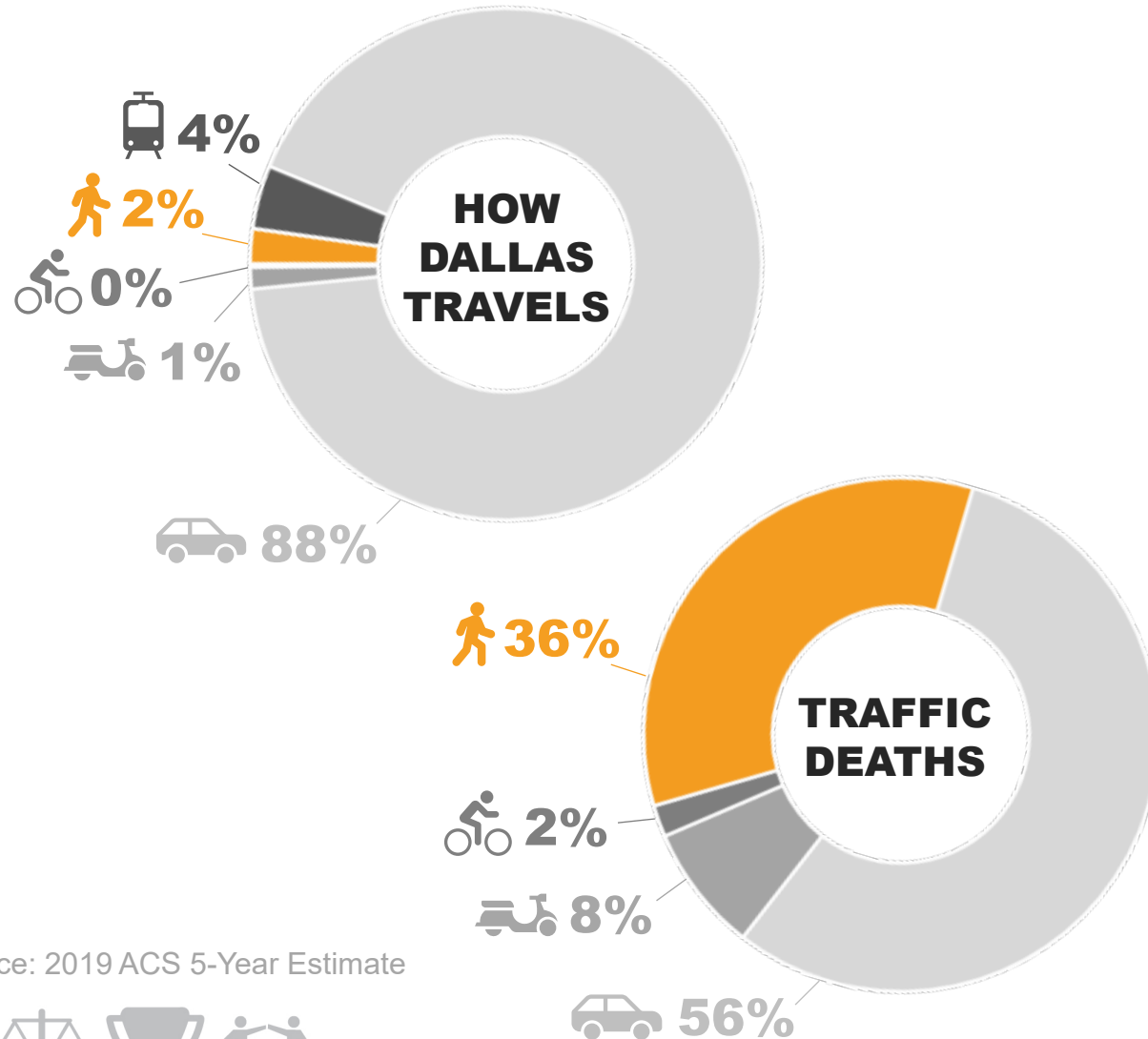
Topic Focus Areas

Factors that account for the highest percentage of fatal and severe crashes (collectively referred to as “severe crashes”) in Dallas:

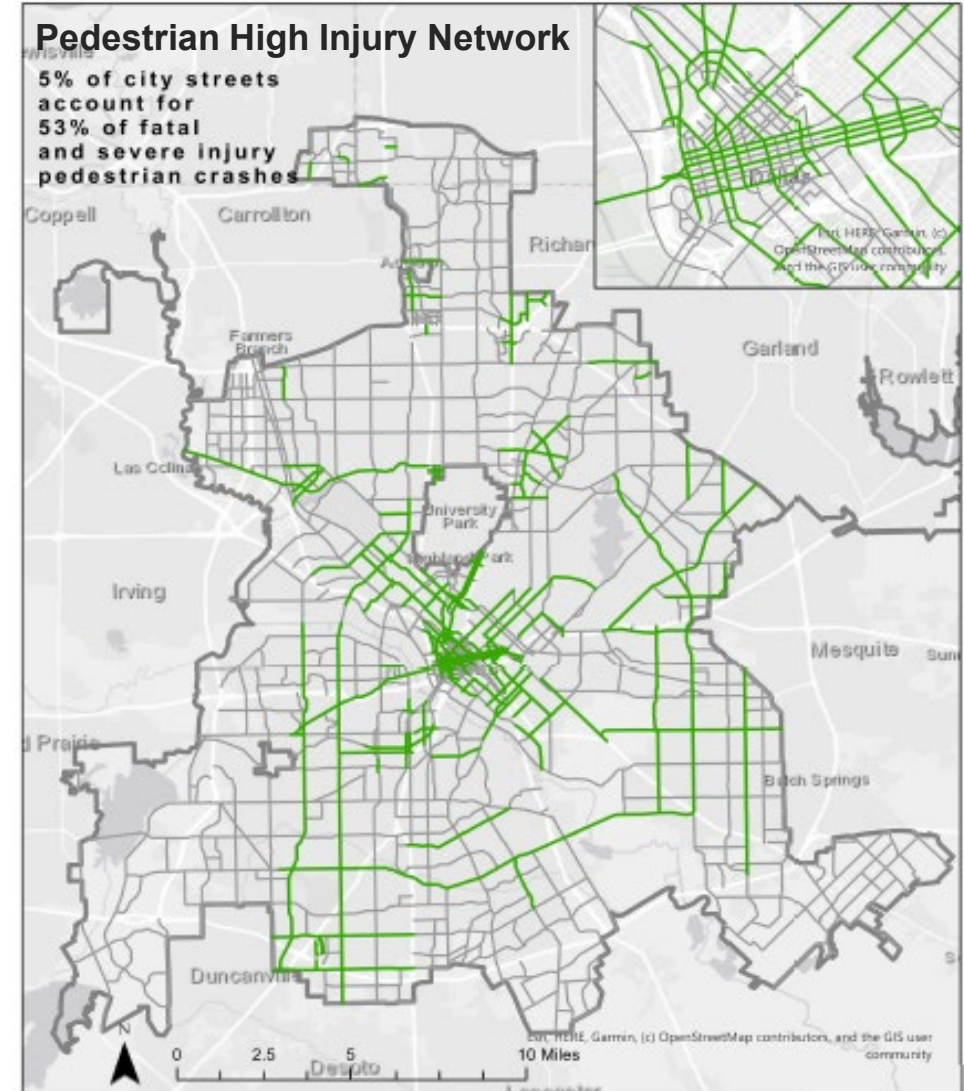
1. **Pedestrian-Involved Crashes** (36% of crashes)
2. **Speeding/Unsafe Travel Speeds** (19% of crashes)
3. **Under the Influence** (14% of crashes)
4. **Not Using Proper Restraints** (Seat Belt, Car Seat) (16% of crashes)
5. **Left-Turn Crashes** (10% of crashes)
6. **Red Light Running** (10% of crashes)
7. **Distracted Driving** (only 5% in crash data, but a top priority in the survey)



4. Focus Areas for the Action Plan



Source: 2019 ACS 5-Year Estimate



4.Focus Areas for the Action Plan

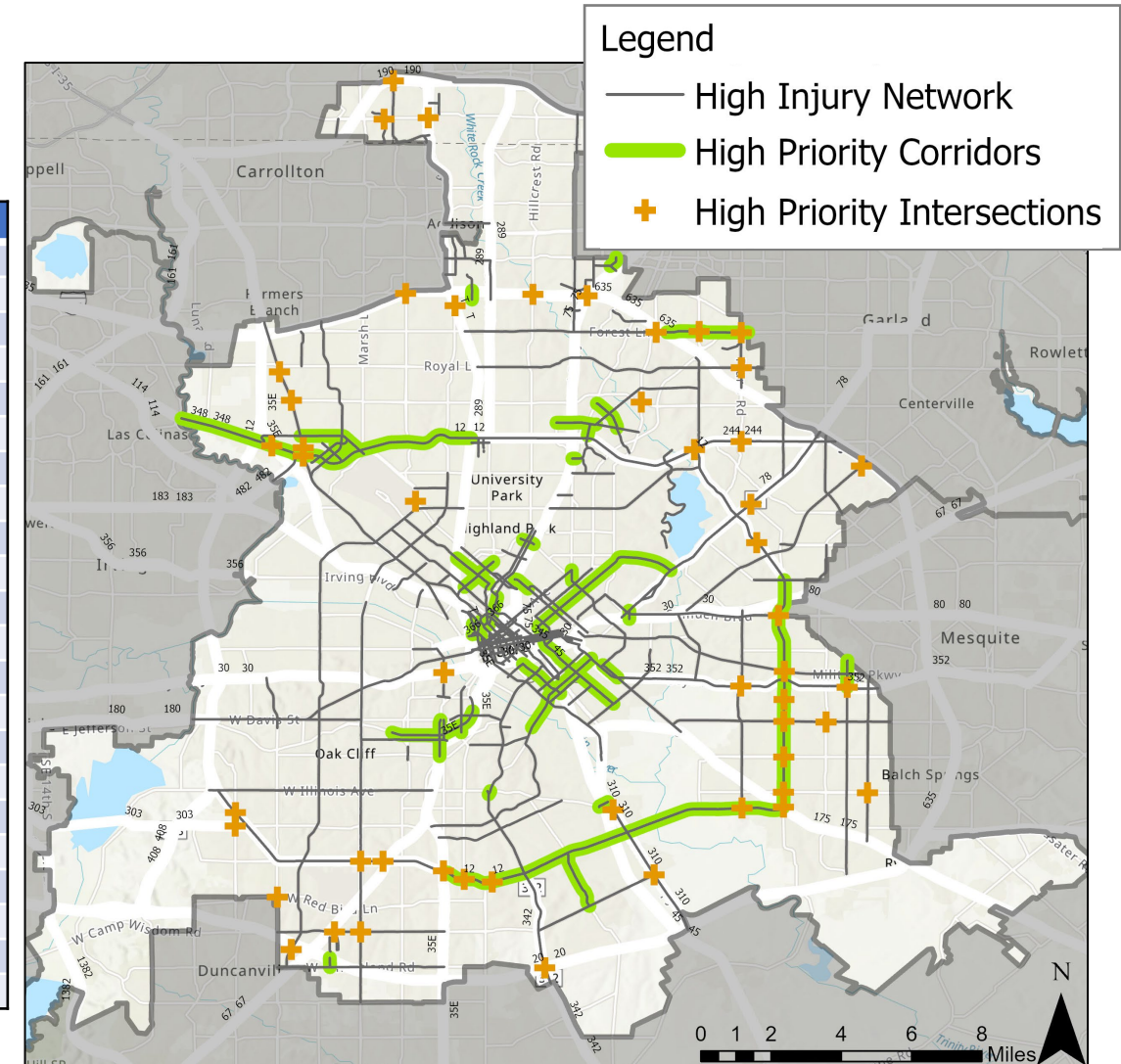


Geographic Focus Areas

High Priority Corridors Segments on the HIN

Street Name	Limits
Knox	McKinney to HP City Limits
Corinth	Illinois to Lancaster
Lamar	225' E OF I-35E to I-35E
Shady Brook	Park Lane to Blackwell
Knox	McKinney to Central Expy
Colonial	MLK to Pennsylvania
Monfort	I-635 to Harvest Hill
Community/Larga	Kendale to Webb Chapel Ext
Lamar	McKinney to Houston
Ledbetter	I-35E to Great Trinity Forest
Webb Chapel EXT	Lombardy to Northwest Hwy
Nowitzki Way	Field to Houston
Jefferson	Edgefield to Zang
MLK/Cedar Crest	Robert B Cullum to 11th
Buckner	John West to I-30
Buckner	Great Trinity Forest to I-30
Great Trinity Forest	Ledbetter to Buckner
McKinney	Akard to Allen
Lamar	Houston to 225' east of I-35E
Forest	I-635 to Garland City Limit
Linfield	Illinois to SH 310
Pineland	Greenville to Park
Cedar Springs	DNT to Turtle Creek

Street Name	Limits
Southwestern	Central Expy to Greenville
Webb Chapel	Lombardy to Northwest Hwy
Goldmark	Spring Valley to Midpark
Marsalis	Jefferson to I-35E
Greenville	Ross to Munger
2nd	Fitzhugh to Scyene
Nowitzki Way	Houston to Victory
Haskell	Blackburn to Lemmon
Ervay	Bellview to MLK Jr.
Jefferson	Zang to Fleming
Oak Lawn	Blackburn to Maple
Lombardy	Harry Hines to Webb Chapel
Kirnwood	Wheatland to I-20
Northwest Hwy	DNT to Irving City Limit
Malcolm X	I-30 to Elsie Faye Higgins
Bonnie View	Ledbetter to Simpson Stuart
Park Ln	Boedeker to Fair Oaks
St Augustine	Sam Houston to Scyene
Zang	Clarendon to Davis
Malcolm X	Gaston to I-30
Winslow	East Grand to I-30
Gaston	Malcolm X to Garland



4.Focus Areas for the Action Plan



Geographic Focus Areas – Systemic Safety Improvements

- Crash data was used to identify the circumstances in which severe crashes occur and their contributing factors.
- Hot spot analyses (what was used to create High Injury Network, High Priority locations) helps us prioritize locations where several crashes have occurred in the past.
- Systemic safety analysis identify specific types of locations that should be addressed system-wide, with the appropriate countermeasures to mitigate future crashes.



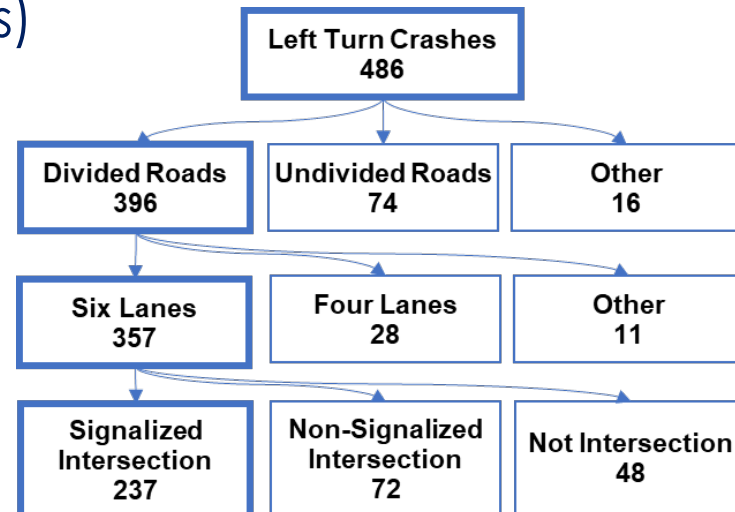
4. Focus Areas for the Action Plan



Geographic Focus Areas – Systemic Safety Improvements

Step 1: Select Focus Crash Type
(E.g., Left-Turn Crashes)

Step 2: Select Focus Facilities
(E.g., signalized intersections on
6-lane roads)



Step 3: Identify Risk Factors
(E.g., traffic volumes, left-turn phasing,
presence of signal backplate, lighting
presence, speed limit)

Step 4: Select Candidate
Locations that Meet Criteria

Step 5: Select Countermeasures

Step 6: Prioritize Projects

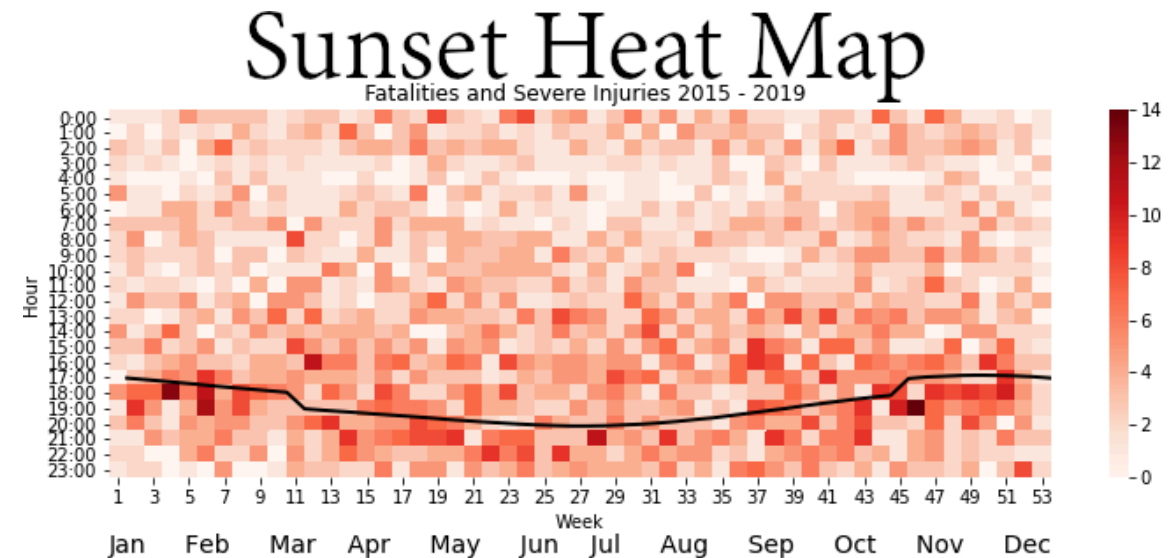


4. Focus Areas for the Action Plan



Other Crash Data Analysis Findings

- Data shows that more severe and fatal injuries occur between sunset and midnight than any other part of the day, with the highest density of severe crashes occurring from 6:00 pm to 9:00 pm.
- There is a spike in crashes in late fall and early spring.



Black line is sunset in Dallas in 2020.
Limited Access Freeways are not included in this analysis.
The darker the cell, the more KSI crashes during that week/hour.
Created 1/29/2021



5. Draft Recommendations



Overall Themes

- Work across departments and agencies and take a comprehensive approach to improving safety using Engineering, Enforcement, Education, Evaluation, and Equity.
- Use data to determine priorities.
- Dedicate resources to reducing fatal and severe crashes.
- Create a culture of safety.



5. Draft Recommendations: Engineering



- **Things we are already doing:**
 - Adding backplates with retroreflective borders to traffic signal heads
 - Increased funding for pavement markings
 - Converting street lights to LED
 - Implementing complete streets projects
 - Implementing the priorities in the Sidewalk Master Plan
 - Updating the existing Bike Plan
 - Seeking funding through TxDOT's Highway Safety Improvement Program (HSIP) to upgrade traffic signals at high crash locations.
- **Preliminary recommendations for additional steps**
 - Expanded engineering safety traffic studies on HIN
 - Evaluation of short, medium and long-term countermeasures
 - Update or adopt new policies, procedures, and standards



5. Draft Recommendations: Enforcement



- **Things we are already doing:**
 - DPD has a dedicated traffic enforcement squad within DPD made up of 25-30 motorcycle officers.
 - Courts & Detention Services has a diversion program to provide alternatives to traffic fines.
- **Preliminary recommendations for additional steps:**
 - Conduct High-Visibility Enforcement along HIN corridors to target the most dangerous driving behaviors
 - Provide consistent levels of enforcement across all DPD Divisions
 - Work with Courts to create graduated penalties for repeat offenders who engage in dangerous driving behavior



5. Draft Recommendations: Education



- **Things we are already doing:**
 - DDOT participation in outreach programs to schools and events
 - DPD Youth Outreach, Car Seat Safety Inspections, Safety Information, Safety & Health Fairs
- **Preliminary recommendations for additional steps**
 - Align all traffic safety education and outreach efforts in the city under the Vision Zero umbrella
 - Convene interdisciplinary meetings to facilitate coordinated and strategic internal and external outreach and education
 - Develop and implement a safety education campaign in coordination with internal and external stakeholders inclusive of community partners
 - Use data to focus education on the most dangerous behaviors, determine the target audience and where to deploy resources



5. Draft Recommendations: Evaluation



- **Things we are already doing:**
 - Collection of crash data
- **Preliminary recommendations for additional steps**
 - Create online, interactive map of crashes, the HIN, Priority Corridors and Intersections, and Vision Zero projects
 - Publish an annual Vision Zero progress report
 - Expand the collection of data to include other sources such as hospital data in addition to police crash reports
 - Develop metrics for evaluating the effectiveness of safety countermeasures on HIN



5. Draft Recommendations: Equity



- **Things we are already doing:**
 - Implementation of the city adopted *ConnectDallas* that covers the guiding principles inclusive of safety and equity
 - Collection of crash data
- **Preliminary recommendations for additional steps**
 - Compare hospital data, police crash reports and other data source to ensure proper capturing of demographics data
 - Integrate equity into the prioritization of countermeasures on HIN



6. Next Steps



- Public Input Phase 2 to collect public and partner feedback on the draft recommendations.
 - Virtual Public Meeting is scheduled to be held at 6 p.m. on Tuesday, November 16, 2021.
 - Online survey will be open from November 16 – November 30, 2021.
- City Council Briefing scheduled for December 15, 2021, to present revised recommendations and Vision Zero Action Plan.
- City Council adoption of the Vision Zero Action Plan in Spring 2022.



7. Discussion/Feedback



- General questions/comments/feedback





City of Dallas

Progress on Vision Zero Action Plan Development

**Transportation and
Infrastructure Committee
November 15, 2021**

Ghassan “Gus” Khankarli, Ph.D. P.E.,
Director, Department of Transportation

Kathryn Rush, AICP, Chief Planner
Department of Transportation